

APPENDIX L

FINAL ASSESSMENT OF OPTIONS

Table L1 Ranking of options following final assessment and summary of criteria used (see subsequent tables for explanation of codes/categories)

Rank	Water body name	Reach #	Reach location	MCA score	Local morphology benefit class	Geomorphic sensitivity	Cost band	Likely land take required	Highest LCA value in reach	Critical infrastructure affected	Stakeholder issues
1	Nith - Sanquhar to New Cumnock	1	Upstream Duncansburn Bridge	76	4	2	4	yes	4.1	1	RSPB ditch blocking in adjacent areas
2	Cample Water	1	Downstream Kirkbog Bank	51	2	2	2	yes	3.2	0	
3	Scar Water	1	Downstream half	46	3	3	4	yes	3.2	0	
4	Scar Water	2	Penpont	35	1	3	2	yes	3.2	1	
5	Nith - Dumfries to Sanquhar	5	Upstream Auldgirth	39	3	3	5	yes	3.1	0	Ongoing fisheries management to reduce vegetation
6	Cample Water	3	Cample to New Cample	37	1	1	1	yes	3.2	0	Tree planting and habitat enhancement work by NDSFB
7	Cample Water	2	Gallows Knowe	32	1	2	1	yes	3.2	0	
8	Laggan Burn	1	Downstream of A76	34	1	1	1	yes	3.1	1	Weir removal project planned – NDSFB
9	Laggan Burn	2	Woodhead	37	1	1	2	yes	4.1	0	
10	Crichope Linn	1	Adjacent to forestry	38	1	0	3	yes	6.3	0	
11	Pennyland Burn	3	Foregirth	39	1	1	3	yes	4.2	0	NDSFB habitat enhancement scheme upstream
12	Pennyland Burn	1	Downstream Wellington Bridge	39	2	1	3	yes	3.1	0	
13	Pennyland Burn	2	Kerricks to East Gallaberry	39	2	1	3	yes	3.2	0	
14	Laggan Burn	3	Downstream Throughgate	36	1	0	2	yes	4.1	1	
15	Nith - Dumfries to Sanquhar	6	Thornhill	31	2	4	4	yes	3.1	0	
16	Nith - Dumfries to Sanquhar	1	Pennyland Burn to A75	30	1	3	3	yes	3.2	0	
17	Crichope Linn	2	Townhead	26	1	0	1	yes	5.3	1	
18	Nith - Dumfries to Sanquhar	4	Auldgirth	26	1	3	2	yes	3.1	1	
19	Laggan Burn	4	Upstream Throughgate	30	1	0	2	yes	4.1	1	
20	Cluden Water / Cairn Water	5	Wallaceton to Kiln Plantation	22	2	2	4	yes	4.1	0	
21	Cluden Water / Cairn Water	7	Shaw Plantation	18	1	3	1	yes	4.1	0	
22	Cluden Water / Cairn Water	4	Gardener's Pool	18	1	2	1	yes	4.1	0	
23	Nith - Dumfries to Sanquhar	2	Swanbridge Cottage to Holm	24	1	3	3	yes	3.1	0	
24	Nith - Dumfries to Sanquhar	3	Laggan Burn to Swanbridge	25	2	2	4	yes	3.1	1	
25	Cluden Water / Cairn Water	6	Crossford Bridge to Wallaceton	22	1	2	3	yes	4.1	1	
26	Cluden Water / Cairn Water	9	Upstream Kirkland bridge	15	3	2	3	yes	4.1	0	
27	Cluden Water / Cairn Water	8	Kirkland bridge to Shaw Wood	15	2	2	4	yes	4.1	1	
28	Cluden Water / Cairn Water	1	Hallhill to Roundhead Plantation	8	1	2	3	yes	3.2	1	
29	Cluden Water / Cairn Water	2	Drumpark Bridge to Cairnryan	10	1	1	2	yes	3.2	2	
30	Cluden Water / Cairn Water	3	Upstream Drumpark Bridge	4	1	1	2	yes	3.2	2	

Table L2 Local morphology benefit class*

Class	Meaning
1	Low
2	Moderately low
3	Moderately high
4	High

* Based on MImAS capacity released without weighting for water body length

Table L3 Geomorphic sensitivity class*

Class	Meaning
0	Very low
1	Low
2	Moderate
3	High
4	Very high

* Based on outcome of geomorphic process assessment

Table L4 Cost bands used in assessment

Cost band	Cost range (£k)
1	<50
2	50-100
3	100-200
4	200-500
5	>500

Table L5 Land capability for agriculture categories

Class	Division	Key points
1	-	<ul style="list-style-type: none"> • Land capable of producing a very wide range of crops • The level of yield is consistently high • Climate is favourable • No or only very minor physical limitations affecting agricultural use
2	-	<ul style="list-style-type: none"> • Land capable of producing a wide range of crops. • The level of yield is high but less consistently obtained than on Class 1 land due to the effects of minor limitations • Slightly unfavourable soil structure or texture • Slightly unfavourable climate • The limitations are always minor in their effect however and land in the class is highly productive.
3	-	<ul style="list-style-type: none"> • Land capable of producing a moderate range of crops. • Land in this class is capable of producing good yields of a narrow range of crops • Degree of variability between years will be greater than is the case for Classes 1 and 2 • Unfavourable structure or texture • The range of soil types within the class is greater than for previous classes.
	3.1	<ul style="list-style-type: none"> • Capable of producing consistently high yields of a narrow range of crops) and/or moderate yields of a wider range • Short grass leys are common.
	3.2	<ul style="list-style-type: none"> • Capable of average production but high yields of barley, oats and grass are often obtained. • Grass leys are common
4	-	<ul style="list-style-type: none"> • Land capable of producing a narrow range of crops. • Yields of arable crops are variable due to soil, wetness/ climatic factors • Yields of grass are often high • Moderately severe climate • Shallow or very stony soils
	4.1	<ul style="list-style-type: none"> • Land in this division is suited to rotations • Yields of grass are high but difficulties of utilization and conservation may be encountered.
	4.2	<ul style="list-style-type: none"> • The land is primarily grassland with some limited potential for other crops. • Difficulties of conservation or utilisation may be severe, especially in areas of poor climate or on very wet soils.
5	-	<ul style="list-style-type: none"> • Land suited only to improved grassland and rough grazing • Land capable of use as improved grassland. • One or more severe limitations render the land unsuited to arable cropping (e.g climate, soil defects)
	5.1	<ul style="list-style-type: none"> • Grass sward and its maintenance present few problems and potential yields are high with ample growth throughout the season. • High stocking rates are possible.
	5.2	<ul style="list-style-type: none"> • Sward establishment presents no difficulties but moderate or low trafficability, patterned land and/or strong slopes cause maintenance problems. • Growth rates are high and despite some problems of poaching satisfactory stocking rates are achievable.
	5.3	<ul style="list-style-type: none"> • Serious trafficability and poaching difficulties and although sward establishment may be easy, deterioration in quality is often rapid. • The land cannot support high stock densities without damage

Class	Division	Key points
6	-	<ul style="list-style-type: none"> • Land capable only of use as rough grazing. • land has very severe site, soil or wetness limitations • Climate is often a very significant limiting factor. • Land affected by severe industrial pollution or dereliction may be included if the effects of the pollution are non-toxic.
	6.1	<ul style="list-style-type: none"> • Land in this division has high proportions of palatable herbage in the sward, principally the better grasses, e.g. meadow grass-bent grassland and bent-fescue grassland.
	6.2	<ul style="list-style-type: none"> • Moderate quality herbage such as white and flying bent grasslands, rush pastures and herb-rich moorlands or mosaics of high and low grazing values characterise land in this division.
	6.3	<ul style="list-style-type: none"> • This vegetation is dominated by plant communities with low grazing values. Particularly heather moor, bog heather moor and blanket bog.
7	-	<ul style="list-style-type: none"> • Land of very limited agricultural value. Land with extremely severe limitations that cannot be rectified. • Agricultural use is restricted to very poor rough grazing.

Table L6 Critical infrastructure code

Class	Meaning
0	No impact on critical infrastructure
1	presence of critical infrastructure prevents full implementation of option, but the option could be modified to avoid the infrastructure, with significant benefit retained (e.g. set back embankments, rather than full removal)
2	presence of critical infrastructure prevents implementation of option